

Appl. No. 10/645,821  
Amdt. dated January 8, 2010  
Reply to Office Action of October 1, 2009

PATENT

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1                    1.        (Currently amended) A computer-implement method of accessing a  
2 ~~portion of multimedia information stored in a multimedia document~~ using a paper document, the  
3 method comprising:  
4                    ~~receiving by a computer an identifier from a selection of one or more identifiers~~  
5 ~~from a first set of identifiers printed on the paper document, which indexes the multimedia~~  
6 ~~information;~~  
7                    receiving by a computer at least one identifier representative of at least one bar  
8 code scanned by a user from among a plurality of bar codes printed on the paper document, each  
9 bar code corresponding to a point in time in the multimedia document;  
10                    determining by the computer one or more time ranges, ~~from a plurality of time~~  
11 ~~ranges, which are temporally consecutive and respectively associated with a plurality of~~  
12 ~~consecutive portions of the multimedia information, based upon the one or more at least one~~  
13 identifier[[s]], each time range having a start time and an end time; and  
14                    determining by the computer one or more [[of the]] portions of [[the]] multimedia  
15 information corresponding to the one or more time ranges, wherein [[a]] each portion of  
16 multimedia information ~~corresponding to a time range~~ comprises information from the  
17 multimedia document information occurring between the start time and end time associated with  
18 the corresponding time range; and  
19                    ~~receiving by the computer another identifier of selection of one or more identifiers~~  
20 ~~from a second set of identifier printed on the paper document;~~  
21                    determining by the computer one or more operations of the multimedia  
22 information based upon the one or more identifiers selected from the second set of identifiers;  
23 and

outputting by the computer for play on the computer or a remote computer the portions of ~~[[the]]~~ multimedia information corresponding to ~~the at least one time range from the~~ one or more time ranges,

wherein the step of determining one or more time ranges comprises one of:  
determining a first time associated with a first identifier from among said  
at least one identifier and determining a second time associated with a second identifier  
from among said at least one identifier; or  
subtracting a first time amount from a time value associated with the at  
least one identifier to produce a first time and adding a second time amount to the time  
value associated with the at least one identifier to produce a second time,  
wherein the one or more time ranges comprises the first time and the  
second time.

2. (Currently amended) The method of claim 1 wherein:  
the multimedia information comprises information of a first type and information of a second type; and  
~~the one or more time ranges includes a first time range; and~~  
the step of determining by the computer one or more portions of [[the]]  
multimedia information comprises determining at least one of information of the first type and information of the second type from the multimedia ~~document information~~ occurring between the ~~[[start]]~~first time and ~~[[end]]~~second time ~~associated with the first time range.~~

3. (Original) The method of claim 2 wherein the information of the first type is video information and the information of the second type is at least one of audio information and closed-caption text information.

4-8. (Canceled)

1                   9.     (Currently amended) The method of claim [[8]] wherein the first time  
2 ~~amount of time~~ and the second time amount of time are determined using information received  
3 from the user-user-configurable.

10-12. (Canceled)

1                   13.    (Currently Amended) The method of claim 1 wherein performing the at  
2 least one operation comprises communicating by the computer the portions of [[the]] multimedia  
3 information ~~corresponding to the at least one time range~~ to a recipient.

1                   14.    (Currently amended) The method of claim 13 wherein ~~communicating~~  
2 outputting the portions of [[the]] multimedia information ~~corresponding to the at least one time~~  
3 ~~range to the recipient~~ comprises communicating by the computer the portions of [[the]]  
4 multimedia information via an electronic mail addressed to the recipient.

1                   15.    (Currently amended) The method of claim 13 wherein ~~communicating~~  
2 outputting the portions of [[the]] multimedia information ~~corresponding to the at least one time~~  
3 ~~range to the recipient~~ comprises communicating by the computer the portions of [[the]]  
4 multimedia information via facsimile.

1                   16.    (Currently amended) The method of claim [[11]] wherein ~~performing the~~  
2 ~~at least one operation~~ comprises further comprising deleting by the computer the portions of  
3 [[the]] multimedia information ~~corresponding to the at least one time range from the multimedia~~  
4 ~~information~~.

1                   17.    (Currently amended) The method of claim [[11]] wherein ~~performing the~~  
2 ~~at least one operation~~ comprises further comprising printing by the computer a representation of  
3 the portions of [[the]] multimedia information ~~corresponding to the at least one time range~~ on a  
4 paper medium to generate a second paper document.

1                   18.     (Currently amended) The method of claim ~~[[11]]~~1 wherein performing the  
2 ~~at least one operation comprises~~further comprising storing by the computer the portions of ~~[[the]]~~  
3 ~~multimedia information corresponding to the at least one time range.~~

1                   19.     (Currently amended) The method of claim 1 further comprising:  
2 receiving by the computer information indicative of selection of one or more  
3 additional identifiers from a ~~second~~ set of identifiers printed on the paper document;  
4 determining by the computer one or more operations based upon the one or more  
5 additional identifiers from the ~~second~~ set of identifiers; and  
6 performing at least one operation from the one or more operations on the portions  
7 of ~~[[the]]~~ multimedia information corresponding to the one or more time ranges.

1                   20.     (Currently amended) The method of claim 19 wherein performing the at  
2 least one operation comprises ranking by the computer the one or more time ranges based upon  
3 contents of the portions of ~~[[the]]~~ multimedia information corresponding to the one or more time  
4 ranges.

1                   21.     (Currently amended) The method of claim 20 wherein ranking the one or  
2 more time ranges comprises:  
3 for each time range in the one or more time ranges, determining by the computer  
4 a relevance of a user-specified criterion with the portion of ~~[[the]]~~ multimedia information  
5 corresponding to the time range ~~to a user-specified criterion~~; and  
6 ranking by the computer the one or more time ranges based upon the relevance of  
7 the user-specified criterion with the portions of ~~[[the]]~~ multimedia information corresponding to  
8 the time ranges ~~to the user-specified criterion~~.

1                   22.     (Original) The method of claim 21 wherein the user-specified criterion  
2 identifies a topic of interest.

23. (Currently amended) The method of claim 19 wherein performing the at least one operation comprises grouping by the computer the one or more time ranges into one or more groups based upon contents of the portions of ~~[[the]]~~ multimedia information corresponding to the one or more time ranges.

24. (Currently amended) A system comprising:  
at least one processor;  
a memory operatively coupled to the processor, the memory storing program instructions that when executed by the processor, cause the processor to:  
~~receive an identifier from a selection of one or more identifiers from a first set of identifiers printed on the paper document, which indexes the multimedia information;~~  
receive at least one identifier representative of at least one bar code scanned by a user from among a plurality of bar codes printed on the paper document, each bar code corresponding to a point in time in a multimedia document;  
~~determine one or more time ranges, from a plurality of time ranges, which are temporally consecutive and respectively associated with a plurality of consecutive portions of the multimedia information;~~ based upon the one or more at least one identifier~~[[s]]~~, each time range having a start time and an end time; and  
determine one or more ~~[[of the]]~~ portions of ~~[[the]]~~ multimedia information corresponding to the one or more time ranges, wherein ~~[[a]]~~ each portion of multimedia information ~~corresponding to a time range~~ comprises information from the multimedia document information occurring between the start time and end time associated with the corresponding time range;  
~~receive another identifier of selection of one or more identifiers from a second set of identifiers printed on the paper document;~~  
~~determine one or more operations of the multimedia information based upon the one or more identifiers selected from the second set of identifiers; and~~

24                   output for play on the computer or a remote computer the portions of  
25           [[the]] multimedia information corresponding to ~~the at least one time range from the one~~  
26           or more time ranges,  
27                   wherein the one or more time ranges are determined by program  
28           instructions that when executed by the processor cause the processor to:  
29                   determine a first time associated with a first identifier from among  
30           said at least one identifier and determine a second time associated with a second  
31           identifier from among said at least one identifier; or  
32                   subtract a first time amount from a time value associated with the  
33           at least one identifier to produce a first time and add a second time amount to the  
34           time value associated with the at least one identifier to produce a second time,  
35                   wherein the one or more time ranges comprises the first time and  
36           the second time.

1                   25.     (Currently amended) The system of claim 24 wherein:  
2                   the multimedia document information ~~information~~ comprises information of a first type and  
3                   information of a second type; and  
4                   ~~the one or more time ranges includes a first time range; and~~  
5                   the program instructions when executed by the processor, cause the processor to  
6                   determine at least one of information of the first type and information of the second type from  
7                   the multimedia document information ~~information~~ occurring between the [[start]]first time and [[end]]second  
8                   time associated with the first time range.

1                   26.     (Original) The system of claim 25 wherein the information of the first  
2                   type is video information and the information of the second type is at least one of audio  
3                   information and closed-caption text information.

27-31. (Canceled)

32. (Currently amended) The system of claim ~~[[31]]~~24 wherein the first time  
amount ~~of time~~ and the second time amount ~~of time~~ are user-configurable.

33-35. (Canceled)

36. (Currently amended) The system of claim 24 wherein the program  
instructions when executed by the processor, cause the processor to communicate the portions of  
~~[[the]]~~ multimedia information ~~corresponding to the at least one time range~~ to a recipient.

37. (Currently amended) The system of claim 36 wherein the program  
instructions when executed by the processor, cause the processor to send the portions of ~~[[the]]~~  
multimedia information to the recipient via an electronic mail.

38. (Currently amended) The system of claim 36 wherein the program  
instructions when executed by the processor, cause the processor to communicate the portions of  
~~[[the]]~~ multimedia information via facsimile.

39. (Currently Amended) The system of claim ~~[[34]]~~24 wherein the program  
instructions when executed by the processor, cause the processor to delete the portions of ~~[[the]]~~  
multimedia information ~~corresponding to the at least one time range~~ from the multimedia  
document information.

40. (Currently amended) The system of claim ~~[[34]]~~24 wherein the program  
instructions when executed by the processor, cause the processor to print a representation of the  
portions of ~~[[the]]~~ multimedia information ~~corresponding to the at least one time range~~ on a  
paper medium to generate a second paper document.

41. (Currently amended) The system of claim ~~[[34]]~~24 wherein the program  
instructions when executed by the processor, cause the processor to store the portions of ~~[[the]]~~  
multimedia information ~~corresponding to the at least one time range~~.

1                   42.     (Currently amended) The system of claim 24 wherein the program  
2 instructions when executed by the processor, cause the processor to: receive information  
3 indicative of selection of one or more additional identifiers from a ~~second~~ set of identifiers  
4 printed on the paper document, determine one or more operations based upon the one or more  
5 additional identifiers from the ~~second~~ set of identifiers, and perform at least one operation from  
6 the one or more operations on portions of [[the]] multimedia information corresponding to the  
7 one or more time ranges.

1                   43.     (Currently amended) The system of claim 42 wherein the program  
2 instructions when executed by the processor, cause the processor to rank the one or more time  
3 ranges based upon contents of the portions of [[the]] multimedia information corresponding to  
4 the one or more time ranges.

1                   44.     (Currently amended) The system of claim 43 wherein the program  
2 instructions when executed by the processor, cause the processor to: for each time range in the  
3 one or more time ranges, determine relevance of the portion of the multimedia information  
4 corresponding to the time range to a user-specified criterion, and rank the one or more time  
5 ranges based upon the relevance of the portions of [[the]] multimedia information ~~corresponding~~  
6 ~~to the time ranges~~ to the user-specified criterion.

1                   45.     (Original) The system of claim 44 wherein the user-specified criterion  
2 identifies a topic of interest.

1                   46.     (Currently amended) The system of claim 42 wherein the program  
2 instructions when executed by the processor, cause the processor to group the one or more time  
3 ranges into one or more groups based upon contents of the portions of [[the]] multimedia  
4 information corresponding to the one or more time ranges.



47. (Currently amended) A computer program product for accessing a portion of multimedia information stored in a multimedia document using a paper document, the computer program product comprising:

a computer-readable storage medium having stored thereon computer program code, the computer program code comprising:

~~code for receiving by a computer an identifier from a selection of one or more identifiers from a first set of identifiers printed on the paper document, which indexes the multimedia information;~~

code for receiving by a computer at least one identifier representative of at least one bar code scanned by a user from among a plurality of bar codes printed on the paper document, each bar code corresponding to a point in time in the multimedia document;

~~code for determining by the computer one or more time ranges, from a plurality of time ranges, which are temporally consecutive and respectively associated with a plurality of consecutive portions of the multimedia information, based upon the one or more at least one identifier[[s]], each time range having a start time and an end time; [[and]]~~

code for determining by the computer one or more [[of the]] portions of [[the]] multimedia information corresponding to the one or more time ranges, wherein [[a]]each portion of multimedia information corresponding to a time range comprises information from the multimedia document information occurring between the start time and end time associated with the corresponding time range; and

~~code for receiving by the computer another identifier of selection of one or more identifiers from a second set of identifiers printed on the paper document;~~

~~code for determining by the computer one or more operations of the multimedia information based upon the one or more identifiers selected from the second set of identifiers; and~~

code for outputting by the computer for play on the computer or a remote  
computer the portions of ~~[[the]]~~ multimedia information corresponding to ~~the at least one~~  
~~time range from the one or more time ranges,~~  
wherein the code for determining one or more time ranges includes one of:  
code for determining a first time associated with a first identifier  
from among said at least one identifier and determining a second time associated  
with a second identifier from among said at least one identifier; or  
code for subtracting a first time amount from a time value  
associated with the at least one identifier to produce a first time and adding a  
second time amount to the time value associated with the at least one identifier to  
produce a second time,  
wherein the one or more time ranges comprises the first time and  
the second time.

48. (Currently Amended) The computer program product of claim 47  
wherein:  
the multimedia information comprises information of a first type and information  
of a second type; and  
~~the one or more time ranges includes a first time range; and~~  
the code for determining portions of the multimedia information comprises code  
for determining at least one of information of the first type and information of the second type  
from the multimedia information occurring between the ~~[[start]]~~first time and ~~[[end]]~~second time  
~~associated with the first time range.~~

49. (Previously presented) The computer program product of claim 48  
wherein the information of the first type is video information and the information of the second  
type is at least one of audio information and closed-caption text information.

50-54. (Canceled)

1                   55.     (Currently amended) The computer program product of claim ~~[[54]]~~47  
2     wherein the first time amount of time and the second time amount of time are user-configurable.

56-58. (Canceled)

1                   59.     (Currently amended) The computer program product of claim 47 wherein  
2     the code for outputting performing the at least one operation comprises code for communicating  
3     the portions of ~~[[the]]~~ multimedia information ~~corresponding to the at least one time range to a~~  
4     recipient.

1                   60.     (Currently amended) The computer program product of claim 59 wherein  
2     the code for communicating the portions of ~~[[the]]~~ multimedia information ~~corresponding to the~~  
3     ~~at least one time range to the recipient~~ comprises code for communicating the portions of ~~[[the]]~~  
4     multimedia information via an electronic mail addressed to the recipient.

1                   61.     (Currently amended) The computer program product of claim 59 wherein  
2     the code for communicating the portions of ~~[[the]]~~ multimedia information ~~corresponding to the~~  
3     ~~at least one time range to the recipient~~ comprises code for communicating the portions of ~~[[the]]~~  
4     multimedia information via facsimile.

62.     (Canceled)

1                   63.     (Currently amended) The computer program product of claim ~~[[57]]~~47  
2     wherein the code for outputting performing the at least one operation comprises code for printing  
3     a representation of the portions of ~~[[the]]~~ multimedia information ~~corresponding to the at least~~  
4     ~~one time range on a paper medium to generate a second paper document.~~

64.     (Canceled)

1                   65.     (Currently amended) The computer program product of claim 47 further  
2     comprising:

3                   code for receiving information indicative of selection of one or more additional  
4   identifiers from a ~~second~~ set of identifiers printed on the paper document;  
5                   code for determining one or more operations based upon the one or more  
6   additional identifiers from the ~~second~~ set of identifiers; and  
7                   code for performing at least one operation from the one or more operations on the  
8   portions of [[the]] multimedia information corresponding to the one or more time ranges.

1                   66.   (Currently amended) The computer program product of claim 65 wherein  
2   the code for performing the at least one operation comprises code for ranking the one or more  
3   time ranges based upon contents of the portions of [[the]] multimedia information corresponding  
4   to the one or more time ranges.

1                   67.   (Currently amended) The computer program product of claim 66 wherein  
2   the code for ranking the one or more time ranges comprises:  
3                   code for determining, for each time range in the one or more time ranges,  
4   relevance of the portion of [[the]] multimedia information corresponding to the time range to a  
5   user-specified criterion; and  
6                   code for ranking the one or more time ranges based upon the relevance of the  
7   portions of [[the]] multimedia information corresponding to the time ranges to the user-specified  
8   criterion.

1                   68.   (Original) The computer program product of claim 67 wherein the user-  
2   specified criterion identifies a topic of interest.

1                   69.   (Currently amended) The computer program product of claim 65 wherein  
2   the code for performing the at least one operation comprises code for grouping the one or more  
3   time ranges into one or more groups based upon contents of the portions of [[the]] multimedia  
4   information corresponding to the one or more time ranges.

70-72. (Canceled)